

Simple Solutions

NextGen Science 6

Topic Guide

Lesson #	Lesson Title	DCI
1A.	Thinking Like a Scientist: Asking Questions and Defining Problems*	
1B.	Thinking Like an Engineer: Asking Questions and Defining Problems*	
2A.	Thinking Like a Scientist: Developing and Using Models*	
2B.	Thinking Like an Engineer: Developing and Using Models*	
3A.	Thinking Like a Scientist: Planning and Conducting Investigations*	
3B.	Thinking Like an Engineer: Planning and Carrying Out Investigations*	
4A.	Thinking Like a Scientist: Using Math*	
4B.	Thinking Like an Engineer: Using Math*	
5.	Review and ongoing practice	
6A.	Thinking Like a Scientist: Analyzing and Interpreting Data*	
6B.	Thinking Like an Engineer: Analyzing and Interpreting Data*	
7A.	Thinking Like a Scientist: Constructing Explanations*	
7B.	Thinking Like an Engineer: Designing Solutions*	
8A.	Thinking Like a Scientist: Communication*	
8B.	Thinking Like an Engineer: Communication*	
9A.	Thinking Like a Scientist: Engaging in Argument from Evidence*	
9B.	Thinking Like an Engineer: Engaging in Argument from Evidence*	
10.	Review and ongoing practice	
11.	What is a Force?.....	MS-PS2.A
12.	Types of Forces.....	MS-PS2.B
13.	Contact Forces.....	MS-PS2.B
14.	Noncontact Forces: Magnetism.....	MS-PS2.B
15.	Review and ongoing practice	
16.	Noncontact Forces: Static Electricity.....	MS-PS2.B #
17.	Noncontact Forces: Current Electricity.....	MS-PS2.B #
18.	Motion: Speed, Velocity, and Acceleration.....	MS-PS2.A #
19.	Motion, Systems, and Frame of Reference.....	MS-PS2.A
20.	Review and ongoing practice	
21.	Balanced Forces.....	MS-PS2.A #
22.	Unbalanced Forces.....	MS-PS2.A #

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Lesson #	Lesson Title	DCI
23.	Newton’s First Law of Motion	MS-PS2.A #
24.	Newton’s Second Law of Motion	MS-PS2.A
25.	Review and ongoing practice	
26.	Newton’s Third Law of Motion	MS-PS2.A #
27.	How Seatbelts Save Lives	ETS1.A-C #
28.	Atoms and Elements.....	MS-PS1.A #
29.	Compounds.....	MS-PS1.A #
30.	Review and ongoing practice	
31.	Solids, Liquids, and Gases.....	MS-PS1.A #
32.	Gases and Pressure.....	MS-PS1.A
33.	Pure Substances and Mixtures.....	MS-PS1.A
34.	Extensive and Intensive Properties	MS-PS1.A
35.	Review and ongoing practice	
36.	Density (An Intensive Property).....	MS-PS1.A #
37.	Solutions and Solubility.....	MS-PS1.A #
38.	Kinetic and Potential Energy	MS-PS3.A #
39.	Kinetic Energy: Mass and Velocity.....	MS-PS3.A
40.	Review and ongoing practice	
41.	Transferring Energy: Contact Forces.....	MS-PS3.C #
42.	Law of Conservation of Energy.....	MS-PS3.B #
43.	Thermal Energy.....	MS-PS3.A
44.	Transfer of Thermal Energy: Conduction	MS-PS3.B #
45.	Review and ongoing practice	
46.	Conductors and Insulators	MS-PS3.B
47.	Transfer of Thermal Energy: Convection and Radiation	MS-PS3.B #
48.	Heat Capacity.....	MS-PS3.B
49.	Changes in Matter: Atoms and Attractions.....	MS-PS1.A #
50.	Review and ongoing practice	
51.	Changes in Temperature and Changes in State.....	MS-PS1.A #
52.	Evaporation and Boiling.....	MS-PS1.A #
53.	Melting and Freezing Points.....	MS-PS1.A
54.	Gas Pressure and Vaporization	MS-PS1.A #

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55.	Review and ongoing practice	
56.	Physical and Chemical Changes	MS-PS1.B
57.	Models of Chemical Reactions.....	MS-PS1.B #
58.	Chemical Reactions and Conservation of Matter	MS-PS1.B #
59.	The Planet Earth and Its Neighborhood	MS-ESS1.B
60.	Review and ongoing practice	
61.	Earth Spins and Revolves: Days and Years	MS-ESS1.B #
62.	Earth’s Satellite: The Moon	MS-ESS1.A #
63.	Solar Energy on Earth’s Surface	MS-ESS1.B
64.	Phases of the Moon, Part I	MS-ESS1.A #
65.	Review and ongoing practice	
66.	Phases of the Moon, Part II	MS-ESS1.A #
67.	When Can You See the Moon?	MS-ESS1.A #
68.	What is a Shadow?.....	MS-ESS1.B
69.	Solar and Lunar Eclipses.....	MS-ESS1.B #
70.	Review and ongoing practice	
71.	Observing a Lunar Eclipse.....	MS-ESS1.B
72.	Observing a Solar Eclipse	MS-ESS1.B
73.	An Annular Eclipse.....	MS-ESS1.B
74.	Why Doesn’t an Eclipse Happen Every Month?	MS-ESS1.B #
75.	Review and ongoing practice	
76.	What Causes the Seasons? Part I	MS-ESS1.B #
77.	What Causes the Seasons? Part II	MS-ESS1.B #
78.	Measuring Distances in Outer Space.....	MS-ESS1.A #
79.	The Universe and the Big Bang Theory	MS-ESS1.A
80.	Review and ongoing practice	
81.	What is a Galaxy?	MS-ESS1.A
82.	Gravitational Forces.....	MS-ESS1.B
83.	Gravity and Inertia Shape an Orbit.....	MS-ESS1.B #
84.	What is a Star?.....	MS-ESS1.B
85.	Review and ongoing practice	
86.	The Formation of Our Solar System.....	MS-ESS1.B #

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87.	How a Planet Forms.....	MS-ESS1.B
88.	Characteristics of the Terrestrial Planets.....	MS-ESS1.B
89.	Surface Features of the Terrestrial Planets	MS-ESS1.B
90.	Review and ongoing practice	
91.	What Is an Atmosphere?.....	MS-ESS1.B
92.	Terrestrial Planets: The Atmosphere.....	MS-ESS1.B
93.	How the Outer Planets Formed	MS-ESS1.B #
94.	Characteristics of the Outer Planets	MS-ESS1.B
95.	Review and ongoing practice	
96.	The Planets and Their Moons.....	MS-ESS1.B
97.	Asteroids	MS-ESS1.B
98.	Comets.....	MS-ESS1.B
99.	Discovering Pluto*#	
100.	Review and ongoing practice	
101.	What Is a Planet?*#	
102.	The Dwarf Planets*#	
103.	Outer Space: The Kuiper Belt.....	MS-ESS1.B #
104.	The Oort Cloud: The Edges of Our Solar System	MS-ESS1.B #
105.	Review and ongoing practice	
106.	The Geologic Time Scale.....	MS-ESS1.C #
107.	Uniformitarianism	MS-ESS1.C*#
108.	Studying Earth’s Rock Layers	MS-ESS1.C*#
109.	Things That Disturb Earth’s Rock Layers	MS-ESS1.C #
110.	Review and ongoing practice	
111.	Fossils.....	MS-ESS1.C
112.	The Fossil Record.....	MS-ESS1.C #
113.	Index Fossils.....	MS-ESS1.C #
114.	The La Brea Tar Pits.....	MS-ESS1.C #
115.	Review and ongoing practice	
116.	Extinctions and Mass Extinctions.....	MS-ESS1.C #
117.	Glaciers and the Evidence They Leave Behind.....	MS-ESS1.C #
118.	Impact Events and the Evidence They Leave Behind	MS-ESS1.C*#

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Lesson #	Lesson Title	DCI
119.	Volcanic Eruptions and the Evidence They Leave Behind	MS-ESS1.C #
120.	Review and ongoing practice	
121.	The Characteristics of Living Things	MS-LS1.A
122.	Ecosystems	MS-LS2.A
123.	Ecosystems: What Living Things Need.....	MS-LS2.A
124.	Ecosystems: Resources and Competition	MS-LS2.A #
125.	Review and ongoing practice	
126.	Relationships between Organisms: Symbiosis	MS-LS2.A #
127.	The Food Chain: How Energy and Matter Move through an Ecosystem	MS-LS2.B #
128.	Food Webs: Interconnected Food Chains.....	MS-LS2.B #
129.	The Important Role of Decomposers	MS-LS2.B #
130.	Review and ongoing practice	
131.	Review and ongoing practice	
132.	Review and ongoing practice	
133.	Review and ongoing practice	
134.	Review and ongoing practice	
135.	Review and ongoing practice	
136.	Review and ongoing practice	
137.	Review and ongoing practice	
138.	Review and ongoing practice	
139.	Review and ongoing practice	
140.	Review and ongoing practice	

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